Welcome to the first Spotlight newsletter produced by The Centre for Health Economics and Medicines Evaluation (CHIME) at Bangor University. This issue focuses on our own work, but subsequent issues will bring together on-going work in this field from institutions across Wales working with Public Health Wales.

This new bi-annual Spotlight newsletter will, in future, showcase work on Health Economics Research in Public Health across Wales, by institutions working in conjunction with Public Health Wales.

Health Economics is the study of how we use scarce health care resources to meet our health care needs in society. Public Health Economics is the study of how society uses scarce resources, within the health care sector and right across government (e.g. housing, education and environment), to improve the health of the whole population.

There is growing political interest in Public Health, often referred to as Population Health, resulting in a palpable shift away from the traditional “medical model” of patient-centred behaviour change interventions towards promoting healthy environments and legislation of health harming products and behaviours.

Health Economists can bring to the table a toolbox of methods for economic evaluation of individual Public Health programmes; methods for priority setting such as Programme Budgeting and Marginal Analysis (PBMA); and methods such as Social Return on Investment (SROI) to explore the wider social benefits of investing in promoting better health for the population.

Want to be included in the next Spotlight?

If you are undertaking Public Health Economics research in conjunction with Public Health Wales and would like to showcase your activity in the next Spotlight (October 2015) please send contributions to Dr Joanna Charles j.charles@bangor.ac.uk by 31st August 2015.
One day Symposium—The Impact of Housing on Health and Wellbeing, 11th March 2015

£2.4 billion is spent every year in the UK treating ill-health related directly to poor housing (World Health Organization, 2011). Cold homes (particularly those below 16°C) substantially increase the risk of respiratory and cardiovascular conditions (Mason and Roys, 2011).

CHHEME is involved in a number of research projects exploring the effects of housing upon health and wellbeing. Dr. Joanna Charles, Mr Nathan Bray and PhD student Mrs Eira Winrow are hosting a symposium to discuss the impact of housing on health.

This event will be an opportunity to share presentations on this topic, drawing on initiatives across Wales and England.

The programme can be found on our website cheme.bangor.ac.uk.

2 Day Short Course - Health Economics for Public Health Practice and Research, 23rd-25th March 2015

Following our success last year, we are pleased to announce CHEME will be running its annual residential short course “Health Economics for Public Health Practice and Research” from 23rd-25th of March.

This course offers those working in Public Health, the NHS, local government, MPH students and Public Health trainees an opportunity to learn about Health Economics and methods of economic evaluation; specific challenges of applying these methods to the evaluation of Public Health interventions; the role of economic modelling; and current guidance from NICE advocating a wide multi-sectoral perspective of analysis.

Programme Budgeting and Marginal Analysis (PBMA) in Respiratory Care in Betsi Cadwaladr University Health Board (BCUHB)

In 2012 BCUHB established a working group to explore spend and provision across the respiratory care pathway. The programme had sponsorship from the Executive Director of Public Health (BCUHB), Mr. Andrew Jones.

CHHEME, working with Public Health Wales, were approached to advise on how to capture the economic outcomes related to pathways and suggested using the PBMA framework. A research group with health economics, clinical, NHS finance and pharmacy prescribing expertise was established.

The course is equally designed to be of value to academic and NHS based health economists who find themselves working on the evaluation of Public Health interventions, away from their comfort zones of traditional health technology assessment.

The course is run by Professor Rhiannon Tudor Edwards with Public Health Wales input from Professor Robert Atenstaedt and guest speakers, such as Dr. Emma McIntosh (Institute of Health and Wellbeing, University of Glasgow), leading sessions on their particular topic of expertise.

The course is priced at £750. CHEME offer 5 subsidised places for Public Health Wales Staff.

For further information contact a.b.lawton@bangor.ac.uk.

A registration form for the course can be found on our website cheme.bangor.ac.uk.

Directors of medicines management, therapies finance, planning, Public Health and health care professionals formed a PBMA panel. The panel used electronic voting to establish criteria for decision making (e.g. clinical effectiveness, cost-effectiveness and patient acceptability) and voted on 13 candidate interventions in which reallocation of resources was proposed.

There was a move to disinvest in the use of Mucolytics, improve medicines waste management, reduce use of high cost antibiotic prescriptions and review skills mix in respiratory care. There was a move to invest in pulmonary rehabilitation, smoking cessation (level 3 pharmacy), Pulmonary Outreach teams across North Wales, explore upstream causes of respiratory problems relating to housing and health, expand Advanced Care Planning, invest in avoiding misdiagnosis in primary care and support appropriate use of secondary care follow up. Finally, there was a recognition to maintain resources for COPD local enhanced services.

CHHEME have written an academic paper describing this exercise and how it demonstrates the potential for health boards to use evidence-based approaches to achieve potentially controversial resource reallocation decisions. The work was also presented at The Lancet’s annual Public Health Science conference.

Programme Budgeting and Marginal Analysis (PBMA) at The Lancet’s annual Public Health Science conference in Glasgow, November 2014
Enhanced Home Care in Anglesey as Part of Prudent Health Care

Prudent Health Care is a central philosophy for Welsh Government. NHS hospitals are experiencing increasing pressures due to rising demand and, as a result of this, are receiving adverse media attention. Hospital at home is not a new idea. It is currently being tried in England (www.hospital-care-at-home.co.uk) and in parts of the USA (led by Johns Hopkins Medicine). BCUHB, responsible for a population of 700,000 across North Wales, is rolling out an Enhanced Care at Home (ECH) programme. Step Up ECH care is GP led with the aim of avoiding or delaying hospital admission. The scheme operates over a two week period, with Senior Community Nurse assessment and virtual ward rounds with a Care of the Elderly Hospital Consultant as most of these patients are very elderly.

CHEME has worked with Dr Steve MacVicar, GP lead for the Isle of Anglesey, Mrs. Glynis Tabberer (BCUHB) and Mrs. Chris Couchman (BCUHB) to follow a cohort of 248 patients cared for at home through the ECH programme 2013/2014. We estimated a saving to BCUHB of one third of costs through patients being cared for at home and only admitted to hospital where necessary. This replicated findings by a study by Johns Hopkins Medicine in the USA, which also found savings of one third in a similar programme. There was positive feedback from patients, and their family carers, receiving daily visits by community nursing staff.

A larger, and longer term, follow up of ECH patients, both Step Up (avoiding admission to hospital where appropriate) and Step Down (early discharge from hospital, where appropriate), is planned in conjunction with Public Health Wales in 2015.

The Business Case for the Prevention of Fires

Dr. Christopher Johnson (Public Health Wales) and Mr. Huw Lloyd-Williams (CHEME) have explored the economics of fire prevention. According to the latest Welsh Government figures there are between 450 and 550 fires in North Wales every year, resulting in between 3 and 15 fatalities.

The economics of fire prevention is made difficult by the fact that many fires that occur in homes or businesses result in deaths. It is necessary, therefore, to attempt to put a value on human life, a task that is contentious. The UK Treasury Green Book puts a value on fatality and injury prevention by utilising willingness to pay methods. The figures are based on estimates used in the Department of Transport's valuation of fatalities in road accident prevention. It values the prevention of a fatality at £1,632,111.

By using this method it is possible to calculate the human cost of fires, but in terms of estimating the health care costs other avenues must be explored. It is possible to estimate the cost to BCUHB of providing care (e.g. per inpatient day, ED visit and ambulance dispatch) and apply these costs to the severity of injuries and casualties of fires. By using these costs (including health care costs) we can apply them to the distribution of residential building types to arrive at the potential cost savings of any proposed fire prevention initiative.

We are exploring, through case studies, the return on investment of a number of fire prevention strategies e.g. sprinkler systems, home fire safety checks and smoke alarms.

Raising the Profile of CHEME and Public Health Wales’s Working Partnership to Public Health Colleagues in England and Scotland and Sharing Evidence Across the UK

Wales faces many of the health challenges experienced by other areas of the UK. There is a large disparity in life expectancy across Wales. We have stubborn smoking rates, rising childhood obesity and poor dietary behaviour and lack of exercise amongst adults.

CHEME staff make an effort to act as a conduit, encouraging information exchange between Health Economists and Public Health organisations in England, Scotland and Northern Ireland.

Professor Rhiannon Tudor Edwards shared our experience of using Programme Budgeting and Marginal Analysis (PBMA) to review the evidence base for £15 million spending on health improvement across Wales at the King’s Fund, in October 2014, and with the Scottish Health Economics Network (HENS) in December 2014.

CHEME keeps an eye on published guidance from the NICE Centre for Public Health Excellence and plays a role in translating academic evidence on the cost-effectiveness of individual Public Health interventions, into information useful to Public Health Wales, setting the strategic direction of Public Health in Wales for the future.
Horizon Nuclear Power say they will ensure that the community, individuals and local businesses will benefit from their involvement on Anglesey. However, the demand for housing may outstrip supply on the island.

Dr Owain, of the University of South Wales, said that politicians could be “mesmerised by the attraction of jobs and the economic development implications of that, without thinking through the full implications of the supply and demand aspects of the residential sector”.

New jobs and economic development could have a positive impact on local health. A socio-economic profiling of the area, surrounding Wylfa Newydd, is being carried out to focus on indicators such as unemployment, economic activity, wage levels, business formation, health status and demographics. This is to create a benchmark against which any future economic improvements can be measured.

New Developments in Health Economics relevant to Public Health

Professor Karl Claxton and colleagues at the University of York argue the NHS price threshold for drugs that give a year of good-quality life should be lowered to £13,000 per QALY, rather than the NICE standard of £20,000–£30,000 per QALY to stop local budgets missing out. A change in the threshold would have implications for public health as many Public Health interventions tend to be closer to the £13,000 per QALY mark.

For further details of Professor Claxton’s research please see:

http://www.journalslibrary.nihr.ac.uk/hta/volume-19/issue-14#abstract

Placements are available at CHEME for Public Health Wales Staff and Trainees. Please see our website for details - http://cheme.bangor.ac.uk

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